Farm Policy

U.S. AGRICULTURAL POLICY

S u m m a r y

S. farm policy has its roots in Depression era legislation of the 1930s when farm prices were depressed and farm income was significantly below income in the rest of the U.S. economy.

Over the decades, a series of legislative acts have revised the original farm programs to reflect the needs and constraints of the times. The most recent farm policy act-the Federal Agricultural and Improvement Act of 1996-changed the role of government in agriculture, continuing the evolution away from intervention in markets and embracing the use of direct payments to producers.

The 1996 Act is likely to increase economic efficiency in U.S. agriculture, but may also bring increased income variability and increased responsibility for producers to manage price and market risk. Business strategies to reduce risk could have implications for farm sector structure and could accelerate the trend in use of production and marketing contracts and other forms of vertical coordination in agriculture.

History of U.S. Farm Policy

- The 1933 Agricultural Adjustment Act (AAA) was a landmark piece of legislation in the history of American farm policy--a major break from previous legislation. Prior to 1933, "farm" legislation had the intent to provide greater opportunities in the agriculture sector.
- The 1933 AAA was designed to address the "farm problem"--low prices (supply surpluses); instability and uncertainty in farm prices and incomes; and low incomes in farm and rural communities. The 1933 AAA gave the U.S. government a new role in the management of the farm sector.
- The AAA and subsequent legislation introduced commodity programs which included production and marketing controls and price and income support programs for many of the most important farm commodities.
- Conditions in U.S. agriculture and the broader economic and policy environment have changed dramatically since the 1930s, but until the 1996 Federal Agricultural Improvement and Reform Act (1996 Act), U.S. farm policy revolved around mechanisms that tied price and income supports to

production controls.

Conditions Have Changed...

- In the early years of farm programs, roughly one-quarter of the U.S. population lived on farms. The current share of population living on farms is less than 2 percent.
- Yesterday's farms were diversified, but today they are often highly specialized. The proportion of farms producing any one commodity covered by farm programs has declined over time as a result of increased specialization of production. For example, in 1949, 1 in 5 farms produced cotton, compared to 2 percent in 1992. In 1949, 59 percent of all farms produced corn for grain compared to 26 percent in 1992. In 1949, 55 percent of all farms produced dairy products compared to 7 percent in 1992.
- Farm commodity programs were developed when the average income of farm households was about one-half that of all U.S. households. With the possible exception of the World War II period, this low relative income status persisted well into the 1960s. Farm households generally achieved in-

come parity with all U.S. households during the 1970s. The situation has remained that way, except for the early 1980s.

• Improved access to rural nonfarm jobs and off-farm income has played an important role in farm households achieving income parity. As discussed in the first section of this briefing book, farm households, on average, depend more on income from off-farm sources for family living than on income from farming.

...Bringing Pressures for Policy Reform

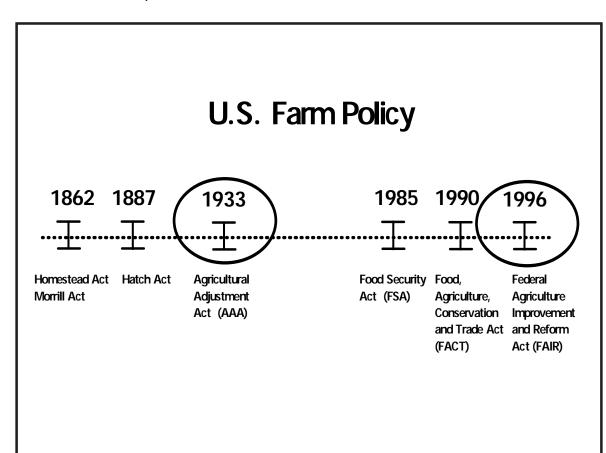
- The changing structure of the U.S. agricultural sector and increasing dependence on world markets built pressure for reform in U.S. farm policy.
- Farm program rules constrained the most efficient producers in that

their production decisions were tied to program parameters rather than to market prices. Additionally, program rules at times restricted the sector's ability to fully compete in the global market place. Acreage controls for some crops allowed competitors to expand.

 Government expenditures for agriculture rose to peak levels in the late 1980s, which increased the Federal budget deficit and induced nonagricultural interests to become concerned with farm program costs.

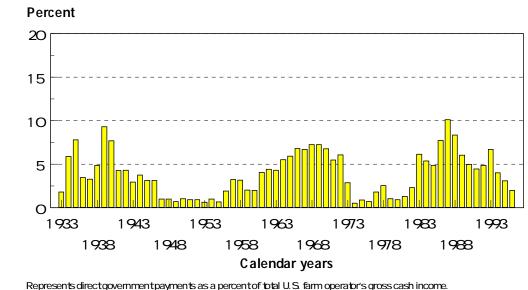
Commodity Programs Managed Downside Risk for Producers

- The U.S. farm sector's dependence on government programs and payments has varied over time. One measure of the ebb and flow of the sector's dependence on farm programs is the level of direct government payments to producers as a percent of gross cash income.
- Dependence on direct government payments is not, however, the only measure of Federal support for the farm sector. Incomes were also protected by a system of price supports that kept prices at or above a set floor price--the government acting as a residual market adjustor and accumulating stocks under weak market conditions. Also, annual supply management programs required the idling of land--more land being idled under weak market conditions.



- Government payments over the 1933 to 1995 period ranged from 1 to 10 percent of gross cash income, as shown in the chart. The level, however, is not as important as the cyclical nature of the farm sector's dependence on government programs.
- Government payments were until 1996 linked countercyclically to market conditions. Under weak market conditions (low prices), government payments increased. Government payments tended to fall when market demand was strong and prices high. Essentially, the federal government through the commodity programs managed the down-side market/price risk for producers.
- It is important to keep this countercyclical nature of government programs in mind. It becomes important later in understanding the implications of the 1996 Act.

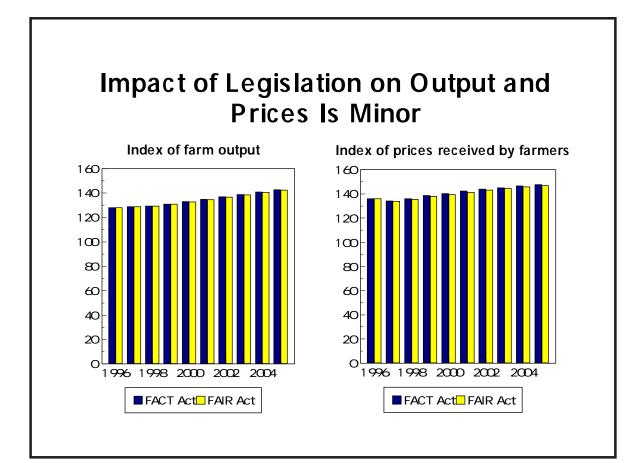
U.S. Government Payments, as a Proportion of Gross Cash Income, Appear to Cycle Through Time



Represents directgovernment payments as a percent of total U.S. farm operator's gross cash incom 1 996 is a forecaast

Regional Differences in Farm Program Dependence

- While direct government payments are 1 to 10 percent of gross cash income for the farm sector as a whole, they are more important in some regions than in others.
- In parts of the Southern Plains, the Western Corn Belt, and the Northern Plains, producers depend on government payments for 30 percent or more of their gross cash income.
 While many factors influence the dependence on government payments, the crop mix and the specialized nature of production, the size of the operation, and the degree of



natural advantages (climate and soil productivity) are important determinants of dependency in these regions.

• The regional pattern of dependency on government payments, like the countercyclical pattern, is an important factor in understanding those areas likely to experience the greatest adjustment burden or pressure as a result of policy reform and the

implementation of the 1996 Act.

1996 Federal Agriculture Improvement and Reform (FAIR) Act

• The 1996 Act is another landmark in U.S. farm policy. First, it takes a major step toward phasing out commodity programs that have been in existence, in some form, since the 1930's. Secondly, it takes the United States to an almost fully market-oriented farm policy.

- In the market orientation sense. the 1996 Act is more evolutionary than revolutionary. It completes the process that began with the two previous farm acts (1985 and 1990) of cutting the link between farm production decisions and government policy signals sent through traditional commodity programs. The 1996 Act completes the move to market orientation by: decoupling planting decisions from program parameters; eliminating annual supply control programs; and, most importantly, it no longer ties government payments to market conditions.
- Responsiveness to market forces will generate economic efficiency gains and make the sector more competitive in the global marketplace. As income variability increases, producers will need to take more responsibility for managing market and price risk.

Impact of Legislation on Output and Prices is Minor

- Projections from USDA and the Congressional Budget Office (CBO) suggest that levels of supply, demand, and prices for most commodities under the 1996 Act will differ little from the levels projected under a continuation of the old (1990) farm act.
- There are two major reasons for this finding. First, operator decisions, at least at the margin, were already being driven by market forces, more so than program parameters, following the 1990 farm legislation. Second, the next ten years point to bullish commodity markets based on expected strong export demand that helps offset government withdrawal of price and income support mechanisms (see trade section of this briefing book).

Farm Income Higher with 1996 Act Contract Payments

• Under a continuation of the provisions of the 1990 Act, direct government payments (called deficiency payments, projected at \$11 billion over 7 years) would have been substantially lower than the contract payments called for under the 1996 Act (capped at slightly over \$36 billion

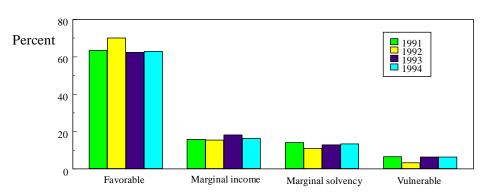
over 7 years). So farm incomes (cash income from the market plus government payments) will likely be higher under the terms of the 1996 Act than they would have been under continuation of the old law.

 Phasing out of commodity programs is not likely to lead to any large-scale displacement of farm operators on a sector-wide basis. First, contract payments will add to farm income and can be used by producers to facilitate whatever financial restructuring and rationalization that needs to take place. Secondly, the farm sector, in the aggregate, is currently financially sound.

Production Flexibility Contract Payments \$ Billion 10 **Production flexibility Deficiency** contract payments 8 payments **Projected** deficiency 6 payments 1988 1990 1992 1994 1996 1998 2000 2002 Fiscal Year

Commercial Farm Financial Position

Most commercial farms that participate in government programs are not dependent on government payments (5 percent or less of gross farm income) and are in a strong financial position.



Even though payments do not represent a significant source of income, livestock farms are likely to be faced with transition issues given low incomes in 1994-95.

ItemDollars per farm
Gross farm income\$230,237
Direct gov. payments\$ 14,494
Net cash farm income\$ 61,863
Net farm income\$ 57,434

150,800 crop farms

ItemDolla	ars per farm
Gross farm income	\$220,304
Direct gov. payments	\$ 8,360
Net cash farm income	\$ 37,659
Net farm income	\$ 24,375

172,000 livestock farms

Commercial Farm Financial Position

- Over 60 percent of commercial farms are in a favorable financial position and many of those farms are not dependent on government payments (payments account for 5 percent or less of gross farm income).
- Only 6 to 7 percent of commercial farms are classified in a vulnerable financial position, with a debt-to-asset ratio of 40 percent or greater. Consequently, little added displacement is expected to result from the 1996 Act.

Some Farms Under Pressure

- Reducing government influence on commodity production and marketing decisions means regions with natural comparative advantage--climate, soil productivity, alternative production possibilities, cost advantages, etc.--will be strengthened, but at the expense of "marginal" areas more dependent upon a "program advantage" than comparative advantage.
- Asset values, particularly land values, in marginal areas where values reflect existing commodity programs will drop. Areas with good productivity and cropping alternatives and less dependence on program returns could see asset values increase.
- Adjustment pressures will likely be greatest in the Northern Great Plains (wheat farms), the Western Corn Belt (mixed grain farms), and in the Southern Plains (wheat/cotton farms).
 There is a possibility of added stress in the Upper Midwest and the Northeast associated with reform in the dairy sector.
- The 34,000 farms identified as being most susceptible to financial restructuring have similar characteris-

tics: moderate size farms with average gross cash incomes around \$100,000; government payments averaging over 30 percent of gross cash income; and a more vulnerable financial position (13 to 25 percent of these farms have a debt-to-asset ratio exceeding 40 percent).

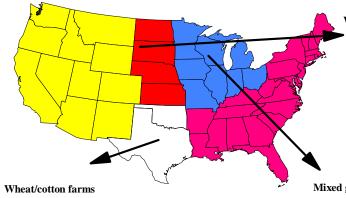
 Vulnerable regions could see an acceleration of farm consolidations and further concentration of production in a small number of large farms.

Market and Price Volatility Call for Risk Management Strategies

- Projected supply and demand conditions are based on "normal weather" and trend yield growth. In reality, we can expect to see continued commodity market volatility on the basis of year-to-year swings in domestic yields and export demand.
- Market and price volatility have been a hallmark of the agricultural sector. Under previous programs, the government played a large role in attempting to manage market/price risk in periods of weak demand-through various supply control and stockholding programs.

Farms Under Pressure

The financial transition will be greatest for 34,000 farms that are most dependent on government payments (20 percent or more of gross farm income).



Wheat farms

Moderate size farms with average gross cash income of \$90,000. Net farm income averaged \$15,000 during 1991-94. Off-farm income averaged \$21,908. Government payments averaged 34 percent of gross cash farm income. Thirteen percent have a debt/asset ratio of 40% or higher.

Crop sales the primary source of income with relatively small amount (8 percent) fromlivestock sales. On average, farmers own 800 acres of the 1,700 operated. Both cash and share rental arrangements have been used to expand operations. Fifty-six percent are age 55 year or older. Ninety-six percent consider farming their primary occupation.

Moderate size farms with average gross cash income of \$110,000. Net farm income averaged \$25,000 during 1991-94. Off-farm income averaged \$32,200. Government payments averaged 36 percent of gross cash farm income. Twenty-five percent have a debt/asset ratio of 40% or higher.

Crop sales the primary source of income with relatively small amount (8 percent) from livestock sales. On average, farmers own 440 acres of the 1,600 operated. Both cash and share rent al arrangements have been used to expand operations. Fifty-five percent are age 55 year or older. Eighty-eight percent consider farming their primary occuration.

Mixed grain farms

Moderate size farms with average gross cash income of \$103,000. Net farm income averaged \$4,500 during 1991-94. Off-farm income averaged \$23,076. Government payments averaged 30 percent of gross cash farm income. Sixteen percent have a debt/asset ratio of 40% or higher.

Crop sales the primary source of income with relatively small amount (9 percent) from livestock sales. On average, farmers own 200 acres of the 650 operated. Both cash and share rental arrangements have been used to expand operations. Twenty-four percent are age 55 year or older .Ninety-one percent consider farming their primary occupation.

- The 1996 legislation allows changes in market prices--not government programs--to "equilibrate" supply and demand. Will commodity prices be more volatile under the 1996 Act? Empirically, we don't know. But, cash farm income could be more volatile.
- U.S. producers are already using many market risk management strate-

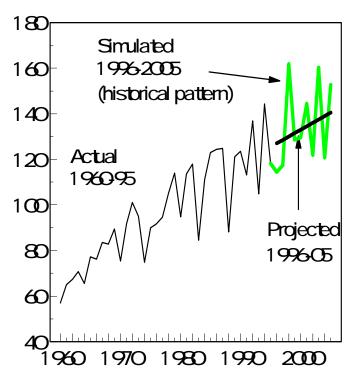
gies. Producers are more often using strategies such as keeping equity in cash and current assets, buying crop insurance, and spreading sales over the year than they are hedging in futures markets.

How do size and ability to manage risk interact? Smaller enterprises with a greater dependence on off-

Corn Yields and Export Variability



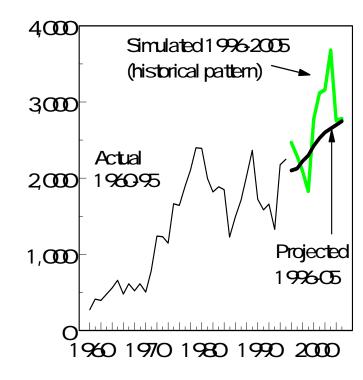
Bushels/acre



Baseline yield projections assume normal weather conditions throughout period

Corn exports

Million bushels



Policy changes, political upheaval, or widespread crop failure could shift export demand in any given year:

farm income are in a stronger position to weather increased market volatility and income swings. Larger diversified operations are in a strong position to take advantage of production, marketing, and financial strategies to manage risk. Many of these larger farms, less dependent on government payments, are those already using a wide array of risk management strategies.

• The medium size farms (smaller commercial farms), appear to be the enterprises most in need of timely market information and a research and education program designed to identify alternative risk management strategies and to improve risk management skills. The 1996 Act essentially places a premium on management and the use of information to control costs and improve financial performance of farm operations

Risk Sharing via Production and Marketing Contracts is Increasing

- The issue of price and income volatility and managing market risk goes beyond the farm gate to the food marketing system.
- Agribusiness has strong interest in dependable supplies, stable prices and constant margins rather than more volatile prices. Agribusi-ness is likely to join producers in search for risk management options.
- In food industries not covered by previous farm programs, such as livestock and horticultural products, risk

Commercial farms

Use of Risk Management Strategies, 1994

		Commercial farms				
		Program participants				
	All farms	All commercial farms	All participants	More than 10% gross cash income from payments	More than 20% gross cash income from payments	
				Percent		
Hedge or use futures markets	11	26	35	34	29	
Contract crop/livestock sales	20	48	57	55	57	
Spread sales over year	39	67	75	76	68	
Forward price inputs	16	42	53	58	57	
Keep unused borrowing capacity/Open credit line	35	66	74	72	68	
Keep equity in cash & current assets	54	80	84	81	75	
Produce stable or low-variability income commodities	28	50	57	56	47	
Government program participation	42	71	94	96	96	
Purchase crop or livestock insurance	40	71	85	46	46	

Source: 1994 Farm Costs and Returns Survey

Risk Sharing Via Contracts Is Low, But Increasing For Field Crops

Output under production and marketing contracts

C ommodity	1970	1994	
Field Crops			
Food grains	2	8	
Feed grains	<1	13	
C otton	11	20	
Livestock			
Broilers	92	92	
Turkeys	60	65	
Fluid grade milk	95	95	
Hogs	1	13	
Fed cattle	18	11	
S pecialty C rops			
Processed vegs.	85	88	
Fresh vegs.	21	25	
Potatoes	45	55	
C itrus	84	88	

Harwood, Joy, Dick Heifner, Keith Coble, and Janet Perry. "Strategies for a New Risk Management Environment," *Agricultural Outlook*, USDA, Economic Research Service, October 1996.

...and suggested readings on U.S. agricultural policy reform:

Nelson, Frederick J., and Lyle P. Schertz, eds. *Provisions of the Federal Agriculture Improvement and Reform Act of 1996*, AIB-729, USDA, Economic Research Service, September 1996.

Young, C. Edwin, and Paul C. Westcott. *The 1996 U.S. Farm Act Increases Market Orientation*, AIB-726, USDA, Economic Research Service, August 1996.

sharing via production and marketing contracts has been a major risk management strategy.

 Output under production and marketing contracts for field crops is low, but increasing. The 1996 Act could accelerate that trend in use of production and marketing contracts and other forms of "vertical coordination" for field crops. Consequently, business strategies to reduce risk could have structural and vertical coordination implications.

Suggested readings on risk management in U.S. agriculture...

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